

EXPRESS MAIL LABEL NO. EV314046155US

DATED: 17 SEPTEMBER 2003

ATTORNEY DOCKET: Nwav 1002-2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of Inventor(s):
Kuo-Ching Liu

Application No. _____

Filed: 17 September 2003 (herewith)

Title: **Method and Apparatus for Cutting
Devices from Substrates**

Group Art Unit: not assigned
Examiner: not assigned

CUSTOMER NO. 22470

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.56

Sir:

It is requested that the information identified in this statement be considered by the Examiner and made of record in the above-identified application. This statement is not intended to represent that a search has been made or that the information cited in the statement is, or is considered to be, material to patentability as defined in 37 C.F.R. 1.56.

Enclosed with this statement is a Form PTO-SB/08. The Examiner is requested to initial the form and return it to the undersigned in accordance with M.P.E.P. 609.

Also enclosed with this statement is a copy of each cited document as required by 37 C.F.R. 1.98.

If a written English-language translation of a non-English language document, or portion thereof, is within the possession, custody or control of, or is readily available to any individual designated in 1.56(c), a copy of the translation accompanies this statement, 37 C.F.R. 1.98(a)(3)(ii), and satisfies the requirement for a concise explanation of relevance, MPEP 609A(3).

This statement should be considered under 37 C.F.R. 1.97(b) because it is being filed within three months of the filing date of an application other than a continued prosecution application under 37 C.F.R. 1.53(d).

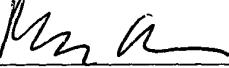
Fee Authorization. The Commissioner is hereby authorized to charge underpayment of any additional fees or credit any overpayment associated with this communication to Deposit Account No. 50-0869 (Nwav 1002-2). A duplicate copy of this authorization is enclosed.

Respectfully submitted,

HAYNES BEFFEL & WOLFELD LLP

Date: 16 Sept 03

By:


Mark A. Haynes, Reg. No. 30,846

HAYNES BEFFEL & WOLFELD LLP
P.O. Box 366
Half Moon Bay, CA 94019
Telephone: (650) 712-0340
Facsimile: (650) 712-0263

Please type a plus sign (+) inside this box →

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

1

of

3

Complete If Known

Application Number	
Filing Date	Herewith
First Named Inventor	Kuo-Ching Liu
Group Art Unit	
Examiner Name	
Attorney Docket Number	NWAV 1002-2

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document Number	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
A1	3,626,141			Daly	12-07-1971	
A2	3,814,895			Fredriksen	06-04-1974	
A3	3,816,700			Weiner et al.	06-11-1974	
A4	4,237,601			Woolhouse et al.	12-09-1980	
A5	4,336,439			Sasnett et al.	06-22-1982	
A6	4,543,464			Takeuchi	09-24-1985	
A7	4,562,333			Taub et al.	12-31-1985	
A8	4,664,739			Aurichio	05-12-1987	
A9	4,906,011			Hiyamizu et al.	03-06-1990	
A10	4,921,564			Moore	05-01-1990	
A11	5,057,664			Johnson et al.	10-15-1991	
A12	5,138,131			Nishikawa et al.	08-11-1992	
A13	5,324,012			Aoyama et al.	06-28-1994	
A14	5,387,776			Preiser	02-07-1995	
A15	5,611,946			Leong et al.	03-18-1997	
A16	5,626,777			Hugl et al.	05-06-1997	
A17	5,627,109			Sassa et al.	05-06-1997	
A18	5,703,713			Leong et al.	12-30-1997	
A19	5,801,356			Richman	09-01-1998	
A20	5,809,987			Wark et al.	09-22-1998	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document Office ³	Number ⁴	Kind Code ⁵ (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
B1		WO	00/75983		Kulicke & Soffa	12-14-2000		
B2		EP	1137072		Matsushita Electric	09-26-2001		
B3		JP	10064854		Hewlett Packard	03-06-1998		
B4		JP	11224866		NGK Insulators	08-17-1999		
B5		JP	2000004066		Nichia Chem Ind.	01-07-2000		
B6		JP	2000196186		Fuji Electric Co.	07-14-2000		
B7		JP	55151351		Mitsubishi Electric	11-25-1980		
B8		JP	56006451		Mitsubishi Electric	01-23-1981		
B9		JP	57066650		Toshiba Corp	04-22-1982		
B10		JP	57081985		Toshiba Corp	05-22-1982		

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box →

PTO/SB/08A (08-00)
Approved for use through 10/31/2002, OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

2

of

3

C mplete If Known

Application Number	
Filing Date	Herewith
First Named Inventor	Kuo-Ching Liu
Group Art Unit	
Examiner Name	

Attorney Docket Number

NWAV 1002-2

U.S. PATENT DOCUMENTS

Examiner Initials ¹	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (If known)			
A21	5,811,751			Leong et al.	09-22-1998	
A22	5,961,852			Rafla-Yuan et al.	10-05-1999	
A23	5,963,364			Leong et al.	10-05-1999	
A24	5,987,920			Bosman et al.	11-23-1999	
A25	5,994,205			Yamamoto et al.	11-30-1999	
A26	6,057,525			Chang et al.	05-02-2000	
A27	6,107,162			Morita et al.	08-22-2000	
A28	6,121,118			Jin et al.	09-19-2000	
A29	6,126,520			Jochim-Schmidt et al.	10-03-2000	
A30	6,130,401			Yoo et al.	10-10-2000	
A31	6,182,733			McReynolds	02-06-2001	
A32	6,365,429			Kneissl et al.	04-02-2002	
A33	6,413,839			Brown et al.	07-02-2002	
A34	6,509,546			Egitto et al.	01-21-2003	
A35	2002/0031899			Manor	03-14-2002	
A36	Re. 33,947			Shinohara	06-02-1992	
A37						
A38						
A39						
A40						

FOREIGN PATENT DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (If known)				
B11		JP	58044738		Toshiba Corp	03-15-1983		
B12		JP	58044739		Toshiba Corp	03-15-1983		
B13		JP	58068946		Toshiba Corp	04-25-1983		
B14								
B15								
B16								
B17								
B18								
B19								
B20								

Examiner Signature

Date Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box →

PTO/SB/08B (08-00)
Approved for use through 10/31/2002, OMB 0651-0031
U. S. Patent and Trademark Office: U. S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

3

of

3

Complete If Known

Application Number	
Filing Date	Herewith
First Named Inventor	Kuo-Ching Liu
Group Art Unit	
Examiner Name	

Attorney Docket Number **NWAV 1002-2**

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C1	"Porous Tungsten & Molybdenum," available at http://www.spectramat.com/pormotun.html .	
	C2	SOILMOISTURE EQUIPMENT CORP., Catalog, available at http://www.soilmoisture.com/ceramics.html .	
	C3	SOILMOISTURE, "Porous Ceramics Catalog," available at http://www.soilmoisture.com .	
	C4	Spectra-Physics Business Units: Products "Navigator II" (10-07-2002), 2 pages, see http://www.splasers.com/products/oem_products/fcb_yhp_series.html .	
	C5	Spectra-Physics: Products "Navigator I" (10-07-2002), 2 pages, see http://www.splasers.com/products/oem_products/navigator1.html .	
	C6	Furukawa Electric, "What is UV-TAPES?" (05-23-2002), 2 pages, see http://www.furukawa.co.jp/uvtape/en/whatis.htm .	
	C7	Furukawa Electric product brochure, "UV-TAPES FOR SEMICONDUCTOR PROCESSING," 8 pages.	
	C8	OSTENDORF, A., et al., "Material Processing Applications for Diode Pumped Solid State Lasers," Lambda Highlights 57, Lambda Physik Pub. (May 2000), 8 pages.	
	C9	VILLENEUVE, TIM, "Nanosecond pulsed lasers improve micro-machining," DESIGNNEWS Semiconductor Manufacturing (04 June 2001) 33-35.	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.